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(54) Title: PROSTAGLANDIN E AGONISTS FOR TREATMENT OF DRY EYE

(57) Abstract

Compositions and methods for the treatment of dry eye and related diseases in mammals utilizing prostaglandin E receptor agonists are disclosed.

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# INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 99/29733

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 A61K31/557

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K C07C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data, BIOSIS, EMBASE, MEDLINE

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE CHEMABS 'Online! CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; HORROBIN, DAVID F.: "Essential fatty acid metabolism in diseases of connective tissue with special reference to scleroderma and to Sjogren's syndrome" retrieved from STN Database accession no. 101:128381 XP002143256	1-15
Y	abstract & MED. HYPOTHESES (1984), 14(3), 233-47 ,	1-15
X	US 4 388 324 A (HORROBIN DAVID F) 14 June 1983 (1983-06-14)	1-15
Y	column 12, line 44 - line 64; claims column 1, line 12 - line 19	1-15
	-/-	



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Patent family members are listed in annex.

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Date of the actual completion of the international search

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International Application No.  
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
E	WO 00 38663 A (ALCON LABORATORIES) 6 July 2000 (2000-07-06) claims	1-15
X	US 5 658 948 A (LUCERO JASMIN C) 19 August 1997 (1997-08-19) column 1, line 9 - line 19; claims column 2, line 9 - line 19	1

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No.

PCT/US 99/29733

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4388324 A	14-06-1983	AT 7856 T	15-06-1984
		AU 534010 B	22-12-1983
		AU 5850280 A	20-11-1980
		CA 1136044 A	23-11-1982
		CA 1149739 A	12-07-1983
		CA 1149740 A	12-07-1983
		DE 3068172 D	19-07-1984
		EP 0019423 A	26-11-1980
		IE 49783 B	11-12-1985
		JP 2075146 C	25-07-1996
		JP 6197735 A	19-07-1994
		JP 7079662 B	30-08-1995
		JP 1833101 C	29-03-1994
		JP 3069888 B	05-11-1991
		JP 55162716 A	18-12-1980
		US 4535093 A	13-08-1985
		US RE31836 E	19-02-1985
WO 0038663 A	06-07-2000	NONE	
US 5658948 A	19-08-1997	US 5504113 A	02-04-1996

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